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| 10/785,083  | 02/25/2004  | Hajime Maki          | Q79995              | 8545             |
| 23373   | 7590        | 11/16/2005           | EXAMINER            |                  |
| SUGHRUE MION, PLLC<br>2100 PENNSYLVANIA AVENUE, N.W.<br>SUITE 800<br>WASHINGTON, DC 20037 |             |                      | SAMPLE, DAVID R     |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1755                |                  |

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchida et al. (US Patent Publication 2002/0187097).

Uchida et al. discloses a method of making an  $\alpha$ -alumina powder by calcining a mixture of an alumina precursor and a seed material. See page 3, Example 5. Example 5 contains 30 wt% seed, and, by subtraction, 70 wt% alumina precursor. Thus, example 5 anticipates step (II) of claim 1 and claim 11.

Claims 2-9 are rejected because they do not apply when step (II) is selected in claim 1.

Example 5 employs aluminum hydroxide as the aluminum precursor, which anticipates claim 10.

Example 5 employs titanium oxide as a see, which anticipates claim 12.

Example 5 calcines at 870°C which anticipates claim 14.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1755

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. (US Patent Publication No. 2002/0187097 as applied to claims 1 and 11 above, and further in view of the teachings of the reference.

As noted above, Example 5 of Uchida et al. anticipate claim 1 and 11. The anticipatory example does not contain one of the species recited in claim 13. However, Uchida et al. discloses that the seed material is preferably an oxide of iron, titanium, or chromium. See paragraphs [0015] and [0016].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted iron or chromium oxide for the titanium oxide of Example 5 because the reference discloses that such compounds are useful seeding materials.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being obvious over Kajihara et al. (US Patent Publication number 2004/0131856).

Kajihara et al. discloses a method of making an  $\alpha$ -alumina powder in which a mixture of an alumina precursor and seed is calcined. See paragraph [0017]. The seed is added in an amount of 0.1 to 30 wt%. See paragraph [0022]. This amount of seed overlaps the amount recited in instant claim 1, step II, and claim 11. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Art Unit: 1755

The reference does not explicitly disclose the amount of alumina precursor present the mixture that is calcined. However, by subtraction, if the reference discloses incorporating 0.1-30 wt% seeds based upon the total amount of alumina, the alumina must be contained in an amount of 99.9-70 wt%.

Claims 2-9 of the instant application are rejected because they do not apply when step (II) is selected in claim 1.

The recitations of instant claim 10 can be found in paragraph [0019] of the Kajihara et al.

The recitations of instant claims 12 and 13 can be found paragraph [0022] of Kajihara et al.

The recitations of instant claim 14 can be found in the reference in paragraph [0026].

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome

Art Unit: 1755

by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

### ***Double Patenting***

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5-15 of copending Application No. 10/671,727 ('727) published as US 2004/0131856. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reference discloses overlapping ranges of seed and alumina precursor content (claim 14) with the amount recited in claims 1 part (II) and claim 11.

Claims 2-9 of the instant application are rejected because they do not apply when step (II) is selected in claim 1.

The recitations of instant claim 10 can be found in claims 6 and 7 of the '727 application

The recitations of instant claims 12 and 13 can be found in claims 11 and 12 of the '727 application.

The recitations of instant claim 14 are rendered obvious by the reference because it would have been obvious to one of ordinary skill in the art to have employed any calcination temperature including the claimed temperature.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1755

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10/846,693 ('693) published as US 2005/0008565. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reference discloses overlapping ranges of seed and alumina precursor content (claim 8) with the amount recited in claims 1 part (II) and claim 11.

Claims 2-9 of the instant application are rejected because they do not apply when step (II) is selected in claim 1.

The recitations of instant claim 10 can be found in claims 2 and 3 of the '693 application

The recitations of instant claims 12 and 13 can be found in claims 5-7 of the '693 application.

The recitations of instant claim 14 can be found in claim 10 the '693 application

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-11 and 14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 11/076,836 ('836) published as US 2005/0201928. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reference discloses overlapping ranges of seed and alumina precursor content (claims 10 & 11) with the amount recited in instant claims 1 part (II) and claim 11.

Art Unit: 1755

Claims 2-9 of the instant application are rejected because they do not apply when step (II) is selected in claim 1.

The recitations of instant claim 10 can be found in claims 2 and 3 of the '836 application

The recitations of instant claim 14 can be found in claim 12 the '836 application

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

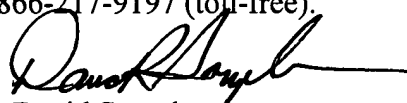


Art Unit: 1755

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (572)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Sample', with a long horizontal flourish extending to the right.

David Sample  
Primary Examiner  
Art Unit 1755